# COMMENTS OF CONSUMERS UNION ON THE CALIFORNIA POWER AUTHORITY'S DRAFT INVESTMENT PLAN William Ahern Oakland, California January 28, 2002

Consumers Union applauds the strategic directions presented in the California Power Authority's Staff Draft Investment Plan. The proposed Plan would put the Authority, its experienced staff, and its low cost loan funds in a badly needed leadership role, assuring reliable, clean, diverse, and cost-effective electricity supply and demand resources for Californians. The proposed action items are focused on problem areas that other agencies and the market alone may not resolve. We applaud the extensive coordination with other agencies and the outreach to diverse public and industry opinions that the draft plan represents. The Authority should assume the important role of functionally integrating the programs and funds of other agencies and the utilities, through Authority staff and contractors, to meet the legislative goals.

The draft Plan focuses on three problem areas that Consumers Union has been **urging the Authority to pursue**:

- -(1) integrated clean green energy and energy efficiency projects;
- -(2) improving the economics of renewable resources; and
- -(3) addressing reliability constraints in specific regions.

The draft Plan also covers areas where Consumers Union believes the Plan **needs changes** and clarifications, specifically:

- -(4) the 22 percent statewide reserve target that is too high and costly;
- -(5) the target of 17 percent renewable resources that may be too high or too low;
- -(6) the cost-effectiveness of distributed generation; and
- -(7) the proposed role of energy broker.

### 1. Integrated Clean Green Energy and Demand Side Products: More, Much More Energy Efficiency.

The staff's analysis shows that permanent energy efficiency improvements are the cleanest and most cost-effective approach for serving future electric energy and peak capacity needs. Yet the Financial Plan allots less than one-quarter of the Authority's loan funds, \$1,140 million, to energy efficiency projects and \$3,456 million to power plants. The levelized cost comparison shows energy efficiency costing only 3-6 cents per kilowatt hour, while all power plant options cost the same, or more. In addition, energy efficiency saves residential and business customers money and improves the economy.

The draft plan presents the levelized costs of peaking power plants, but not the costs of energy efficiency and demand side management programs. Projects such as more efficient and peak demand cycling air conditioning should have costs and environmental benefits much more attractive than peaking power plants. The plan needs more analysis and comparisons of the cost effectiveness of these options, including at least some rough evaluation of the environmental and reliability benefits of energy efficiency projects.

From the analysis presented, Consumers Union concludes that the proportion of funding targeted to energy efficiency should be substantially increased. The Authority should look at the comparative benefits of plans that devote one-half and three-quarters of the funds to energy efficiency. Such plans would better meet the Authority's mandates to assure reliable, affordable, and clean electrical services.

Another advantage of energy efficiency services is that the Authority can finance them through contractors, and then recover its revenues through customer savings and utility bills. The plan observes that this needs agreement from the California Public Utilities Commission and the utilities, but the benefits are obvious. The Authority's contracts can play the unique and important role of selecting energy efficiency contractors who will conduct efficiency audits and integrate utility rebate programs, Energy Commission grant and loan programs, and the Authority's low cost loans in comprehensive packages for customers. Such one-stop-shopping and full financing packages should make energy efficiency improvements more attractive not only to businesses but also to the harder-to-serve residential markets. All the proposals in the Plan's Energy Efficiency and Demand-Responsive Load Reduction section to overcome obstacles in these markets

are badly needed. They are so persuasive that they make the case for a higher proportion of Authority funding being devoted to them.

Another advantage of demand response programs is that they can be combined with renewable generating resources, particularly wind power, to provide firm green peak capacity. The plan shows that wind power is the most cost effective of the renewable resources, but its reliability at peak demand times is uncertain due to its reliance, of course, on the wind. By combining wind projects with demand response projects such as load management through cycling, the Authority could provide clean, least cost, integrated peak capacity. This too could be an important and unique role for the Authority, to functionally integrate the programs of the utilities, the CAISO, DWR, and CEC in "Greening the Peak" (p.28).

Consumers Union strongly supports the Plan's emphasis on both energy efficiency and renewable technologies for public buildings. The major advantage from the Authority's role would not be low cost financing, as public entities can issue tax exempt financing. But the Authority can bring the push, price savings, and expertise to public agencies which operate extensive facilities. Usually such agencies have difficulty obtaining budget authority for capital improvements, even cost-effective ones such as the proposed Authority projects. The price benefits of bulk purchasing and the full financing packages that Authority contractors could bring to public agencies should substantially mitigate the myriad obstacles local and State government agencies face in promoting efficiency and renewables.

### 2. Improving the Economics of Renewable Resources.

The Authority's low cost financing can clearly improve the comparative costs of capital-intensive renewable resource projects compared to gas-fired power plants. That will help development of renewable resources. But the second obstacle to renewable development, the lack of a wholesale market for the next few years, is difficult to resolve. The Department of Water Resources' power contracts is the \$43 billion elephant sitting on renewable resource developers. We agree with the draft Plan observation that the Governor must renegotiate these contracts. They contradict his own goals for affordable electricity and renewable resources.

But the cost of the DWR contracts, 6-8 cents per kilowatt hour, should not be the price benchmark for renewable resource projects, or for any new

projects to meet increasing demand (p. 17, footnote 18). When new capacity is needed, utility ratepayers need 3-5cents/kwh projects. The current and forecasted high power costs are not sustainable for consumers and the economy. The Authority's letters of intent with renewable projects and analysis of energy efficiency programs show the high costs can and should be reduced.

#### 3. Addressing Reliability Problems in Specific Regions: Need More.

Consumers Union has suggested in the past that the Authority become involved in integrated resource planning to resolve local reliability problems. The Authority can functionally integrate efficiency, load management, renewable resource, and conventional gas-peaker projects in comprehensive approaches to improve reliability. The draft Plan proposes such an approach for the San Francisco-San Jose corridor.

We support the Authority's seeking legislation to enable the Authority to also fund transmission where the CAISO finds added transmission capacity is needed to relieve congested paths and provide adequate reliability (p.7). Such authority is needed so the Authority can possess all the tools for comprehensive resolution of local reliability problems.

The CAISO has identified areas other than the San Francisco Bay Area as having generation deficiencies ("ÏSO Suggested Generation Deficiencies in RMR Areas, PG&E Area", PA-8, Joint Legislative Audit Committee hearing on the Authority, November 26, 2001). While the Authority must start somewhere, the final Plan should present a ranking of the other areas that need attention, such as the Humboldt, North Coast, and Fresno areas.

#### 4. The 22 Percent Reserve Margin Target Is Too High

The key draft plan objective of adding 8,000Mw by 2006 to provide a 22 percent reserve margin, mainly to protect against price spikes in a competitive market, looks harmful to ratepayers and unnecessary. We support the California Independent System Operator's staff proposal to require load serving entities to provide 15 percent reserves above forecasted monthly peak demand for reliability (CISO, "Market Design 2002 Project discussion draft," January 2002, p.12). This ties the costs for reliability to the load being served, a principal of the draft plan.

If added reserves are needed to make competitive markets work efficiently, then California should avoid such added costs, at least for residential and small business consumers. Consumers Union has concluded that small users should not be subject to the instability and volatile costs of competitive retail markets. We are recommending that the distribution utilities continue the role of franchised energy provider for such customers, with a clear obligation to serve. The utilities would procure energy for small customers through a bidding process. We support such wholesale competition. If the utilities provide the energy mainly with retained generation and bilateral contracts, and provide 15 percent reserves, economic reserves will not be needed (Consumers Union, "Protecting Residential and Small Business Electricity Consumers," January 20, 2002, attached).

Large business users will want direct access to alternative energy providers in a retail competitive market. If that is the structure of the future California market, then such large users should pay for any surplus reserves needed to make markets work. We prefer that the CAISO and Federal Energy Regulatory Commission fix the market, rather that make California add costly reserves to make a market work well.

The target reserves for reliability and price spike mitigation in the Plan should be connected to the future electricity market structure in California. What that will be is uncertain. But at present, the DWR purchases energy for utility customers mainly through bilateral contracts, with some power from the spot market. Consumers do not have direct access to competitive providers. If this structure continues, then there will be no retail competition. The load serving entities, the utilities and the DWR, and the CAISO, are responsible for preventing price spikes. They can do that through contracts and price caps and other market design mechanisms. There is unlikely to be a market for 22 percent reserves.

#### 4. The Target of 17 Percent Renewable by 2006 Needs Work

The Governor has presented a goal of 17 percent renewable resources in the total State energy portfolio by 2006. He needs to renegotiate the DWR contracts for gas-fired power plants that prevent this goal being met. And he and the Authority should support legislation creating a renewable resource portfolio standard.

What the real target should be that would clearly benefit consumers and the environment is still uncertain. The draft plan does not place any explicit value on the environmental and hedging, diversity benefits of renewable resources and energy efficiency compared to fossil-fuel projects. The Authority should analyze such values. Public Utilities Code Section 701.3 directs the Public Utilities Commission to complete "...an electric generation procurement methodology that values the environmental and diversity costs and benefits associated with various generation technologies..." The CPUC has not done so, and it will be a long time before that is addressed in the CPUC proceeding to determine the groundrules for future utility procurement of energy (CPUC, Rulemaking 01-10-024).

The CPUC utility procurement proceeding is also addressing the possible role for the Authority in helping the utilities meet the renewable resources generating capacity requirement the CPUC should adopt by the end of 2002. A number of parties endorse the Authority's conducting solicitations from renewable energy projects, such as the letters of intent process the Authority has already undertaken, for the utilities (e.g. TURN, SDG&E, PG&E). The Authority's process could provide the utilities with low cost renewable power that the CPUC would consider reasonable per se. The Plan should refer to this role, as another role where the Authority can functionally integrate renewable resource goals with CPUC and utility programs.

The CPUC has been reluctant to recognize the authority of DWR to impose power costs on ratepayers, especially long term contract costs that look unreasonably high. The Authority's developing power costs could also be controversial, and diminish the accountability of the CPUC for retail rates. Joint development of the goals and process with the CPUC, and an open bidding process, should preclude problems.

## 5. Promoting Distributed Generation Is Important, but Current Consumer Impacts Should Be Considered

Consumers Union supports distributed generation alternatives that can save consumers money, improve reliability, provide environmental benefits, and give consumers choices to utility service. But unfortunately the Governor and DWR's power contracts and the bypass allowed by the CPUC make new distributed generation problematical for utility ratepayers. The \$43 billion of power contracts costing 6-8 cents/kwh are twice current and forecasted

market prices. These costs create a new category of stranded costs, uneconomic costs that should be spread over all utility ratepayers suffering from the DWR contracts. When energy-using customers leave the utility system, these stranded costs increase for each remaining customer. The Legislature in January 2001 authorized the CPUC to halt new direct access and customers leaving the system. But the CPUC did not take action until September 2001, and large users constituting 9-14 percent of utility load escaped the stranded costs.

Distributed generation should play a major role in California's energy future. The Plan should analyze the impact on all remaining ratepayers of fostering new distributed generation projects at this time, as part of the required cost effectiveness analysis.

Consumers Union supports "priming the pump" for distributed generation, especially photovoltaic panels. As the draft Plan observes, production of such technologies depends on a steady market of a size large enough to decrease average costs of production. Until 2006 there is some level of market needed for development of solar, fuel cell, and microturbine technologies. The Authority should start developing such markets, but not encourage widespread escaping from DWR contract stranded costs until the legislature and/or CPUC work out a method for all current customers to pay for such costs.

#### 6. The Authority's Proposed Broker Role Is Troubling.

The draft Plan proposes that the Authority "...act as an appropriate broker to bring together buyers and sellers in a marketplace for cost-effective large-scale, clean energy technologies."(p.24) The first such role appears to have been persuading DWR to enter into short term contracts with existing biomass power plants in the Central Valley. (p.26) Consumers Union does not endorse the Authority becoming an advocate for private businesses outside a public bidding process such as the RFP-Due diligence-ranking-letter of intent process conducted for new projects. The Authority should not pressure purchasing entities such as DWR or the utilities to contract with specific projects outside a public process showing need and cost-effectiveness. Such actions are contrary to the Authority's legislative mandates.

#### Conclusion.

The Authority's most helpful and credible role is to meet the energy and reliability needs identified by the CAISO, the CPUC, DWR, and load serving entities that have the obligation to serve. The Authority can bring its talents and loan funds to functionally integrate and match such needs with all the cost-effective tools deployed by the Authority and other agencies and private partners. We hope the final Plan will be regarded as a focused problem-solving plan that helps restore integrated resource planning for California's electricity ratepayers.